

Fig 1 A

Appl. No. *To be assigned*; Group Art Unit: *To be assigned*;
 Dkt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
 Inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
 Title: ARTIFICIAL MAMMALIAN CHROMOSOME

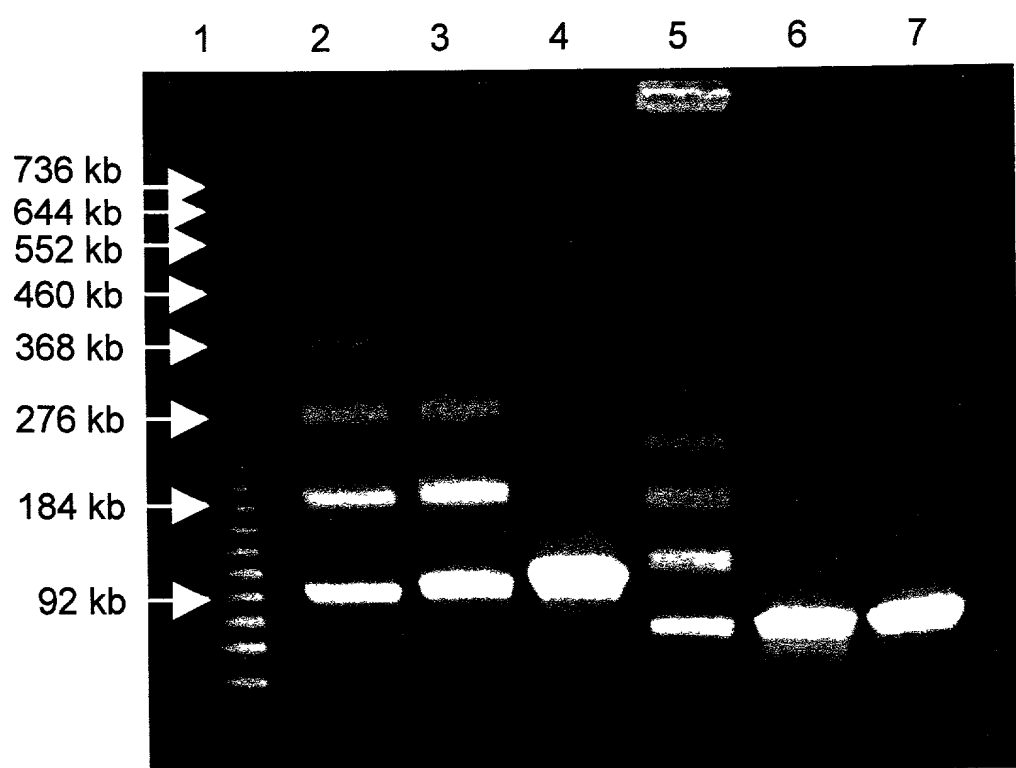


FIG.1B

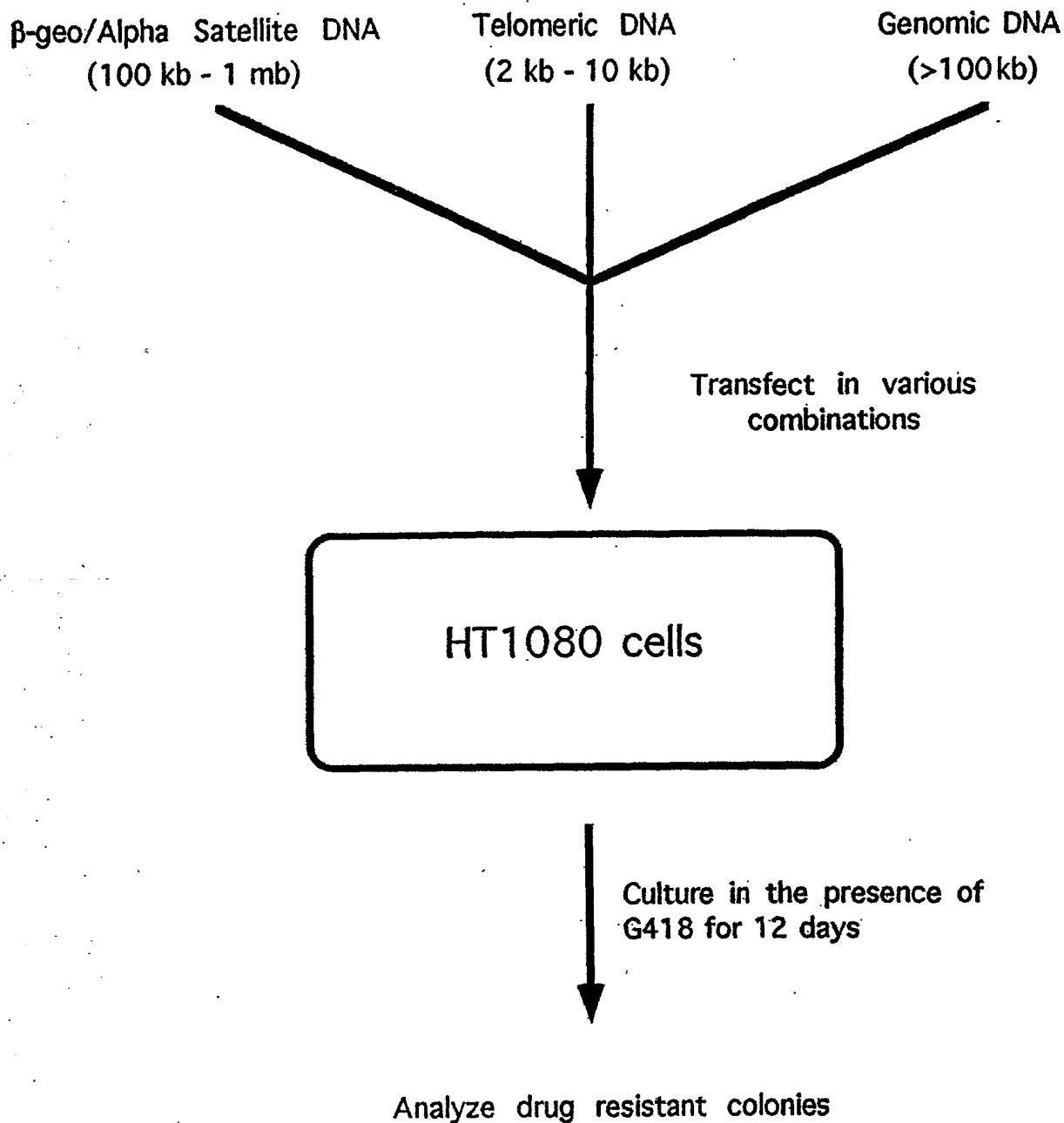


Fig 2

ppl. No. *To be assigned*; Group Art Unit: *To be assigned*;
kt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
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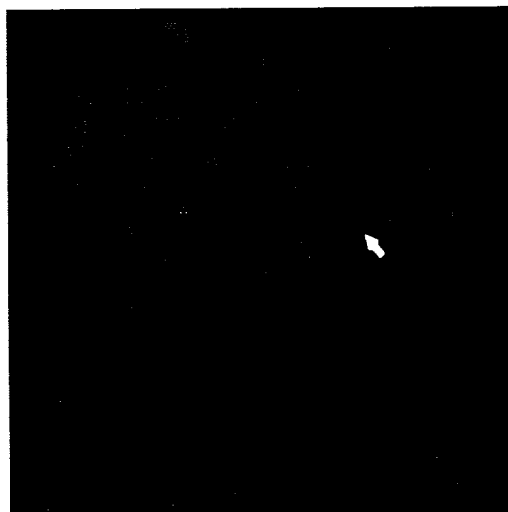


FIG. 3A

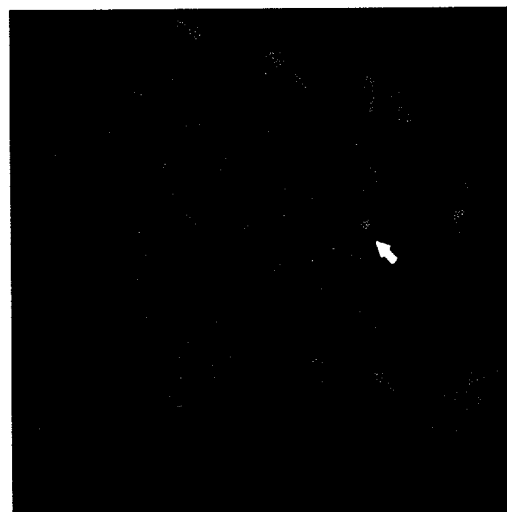


FIG. 3B

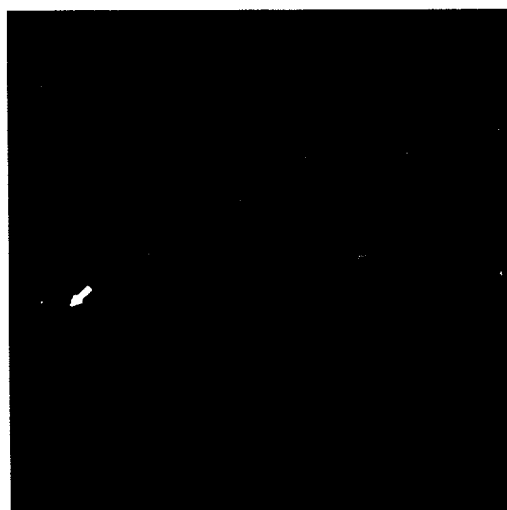


FIG. 3C

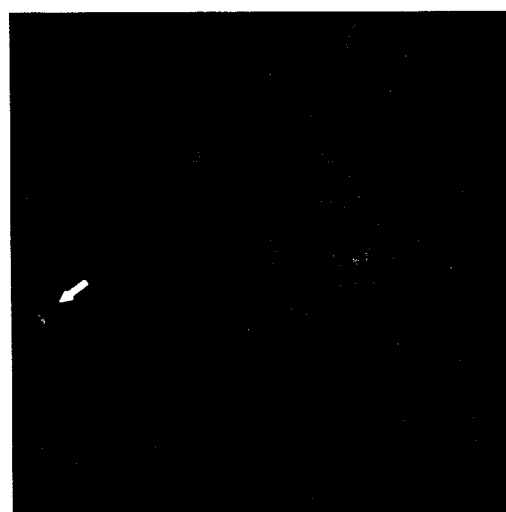


FIG. 3D

10023033-134501

Appl. No. *To be assigned*; Group Art Unit: *To be assigned*;
 Dkt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
 Inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
 Title: ARTIFICIAL MAMMALIAN CHROMOSOME



FIG. 3A

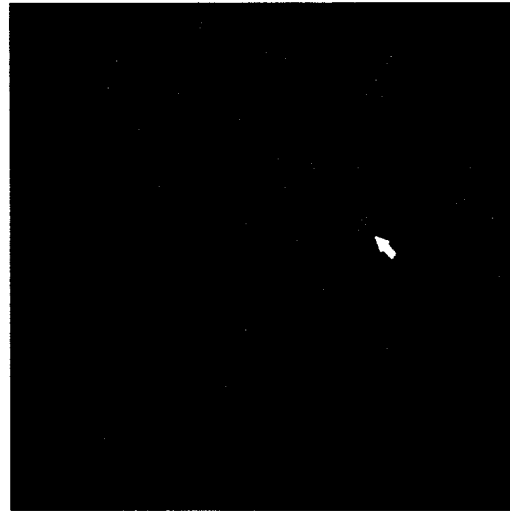


FIG. 3B



FIG. 3C



FIG. 3D

10023033-424904

Appl. No. *To be assigned*; Group Art Unit: *To be assigned*;
Dkt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
Inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
Title: ARTIFICIAL MAMMALIAN CHROMOSOME

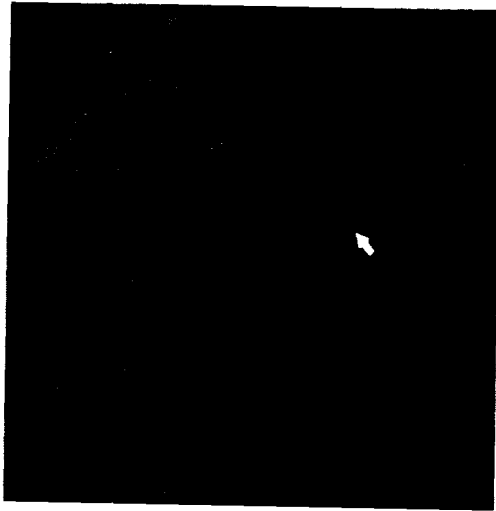


FIG. 3A

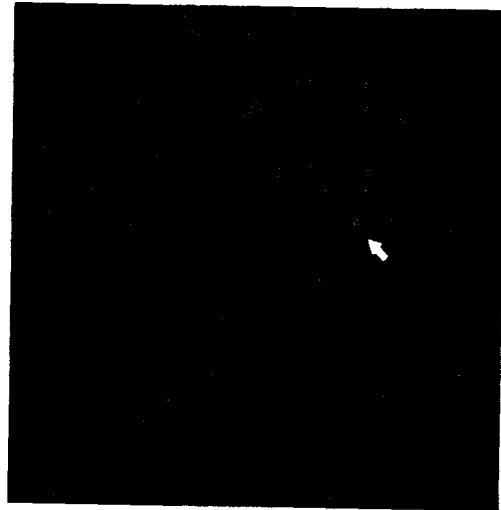


FIG. 3B

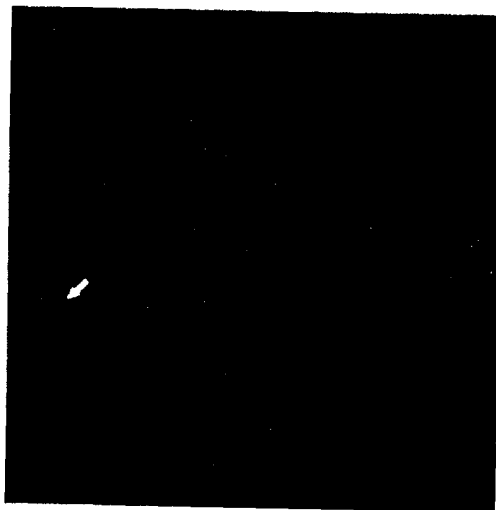


FIG. 3C

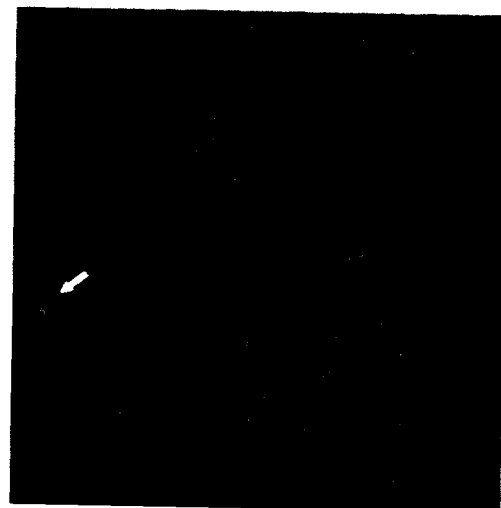


FIG. 3D

1002203-424904

ppl. No. *To be assigned*; Group Art Unit: *To be assigned*;
kt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
title: ARTIFICIAL MAMMALIAN CHROMOSOME

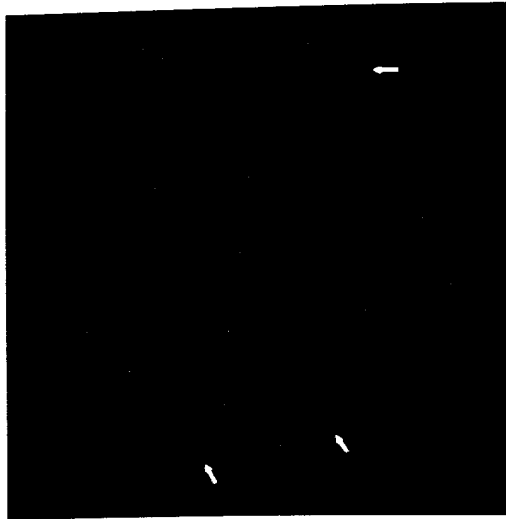


FIG. 4A

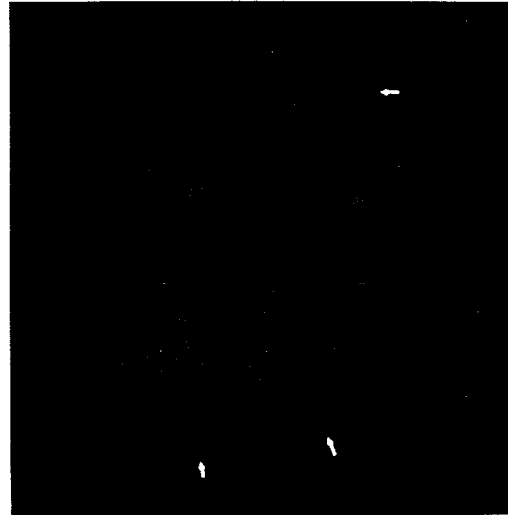


FIG. 4B

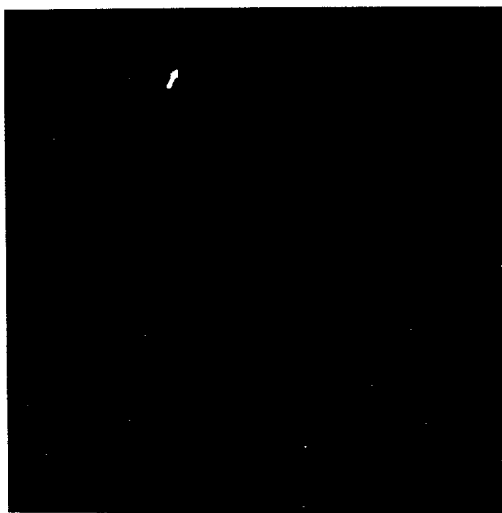


FIG. 4C

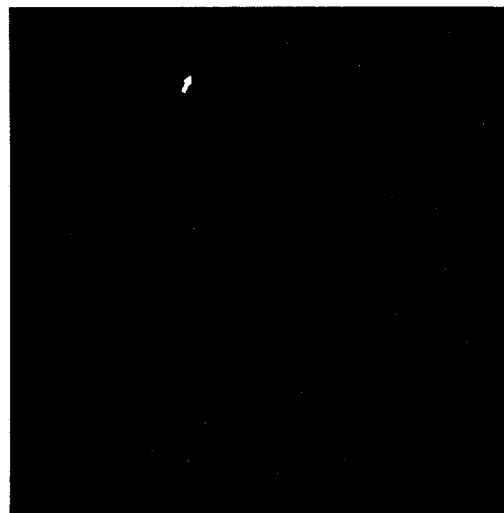


FIG. 4D

100303-4901

Appl. No. *To be assigned*; Group Art Unit: *To be assigned*;
Dkt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
Inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
Title: ARTIFICIAL MAMMALIAN CHROMOSOME

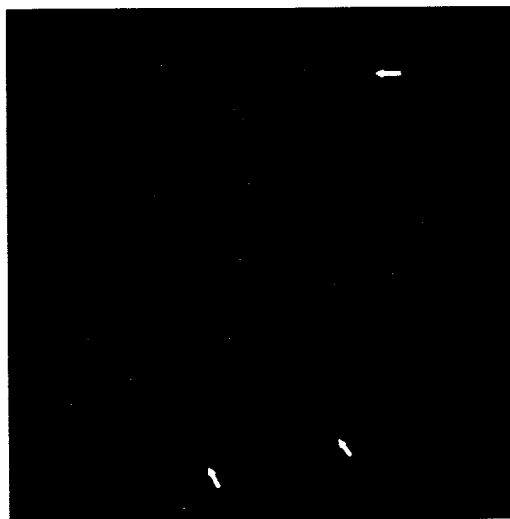


FIG. 4A

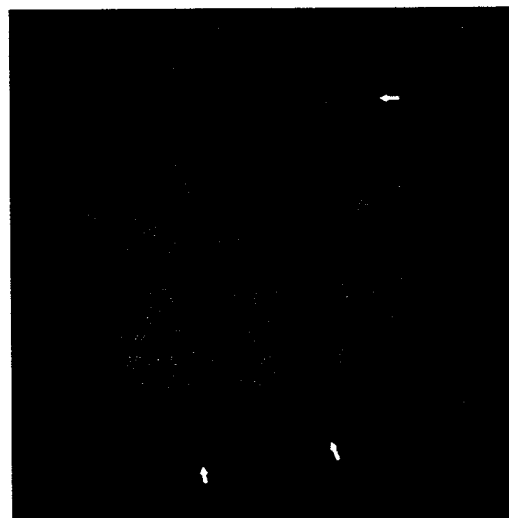


FIG. 4B

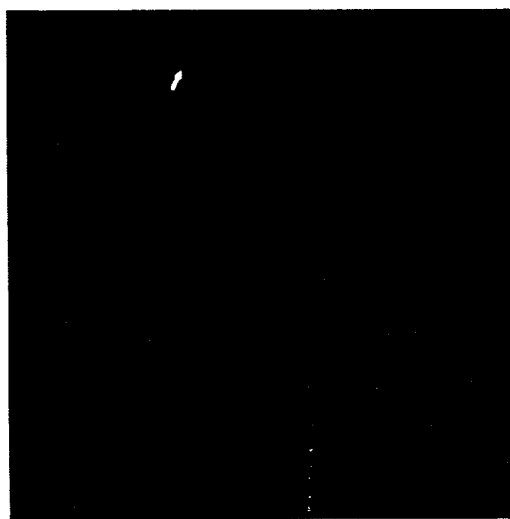


FIG. 4C

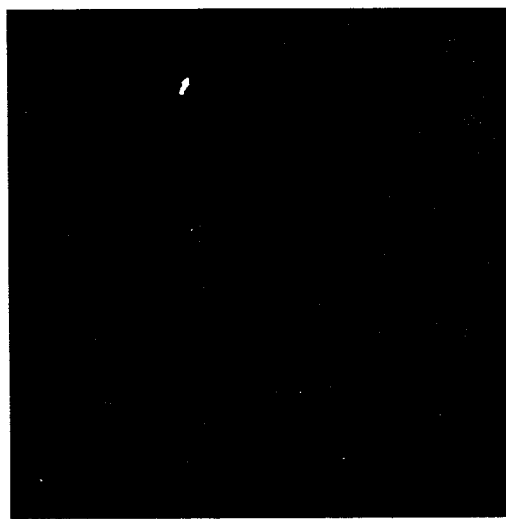


FIG. 4D

10023033.164901

Appl. No. *To be assigned*; Group Art Unit: *To be assigned*;
Dkt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigne*
Inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
Title: ARTIFICIAL MAMMALIAN CHROMOSOME

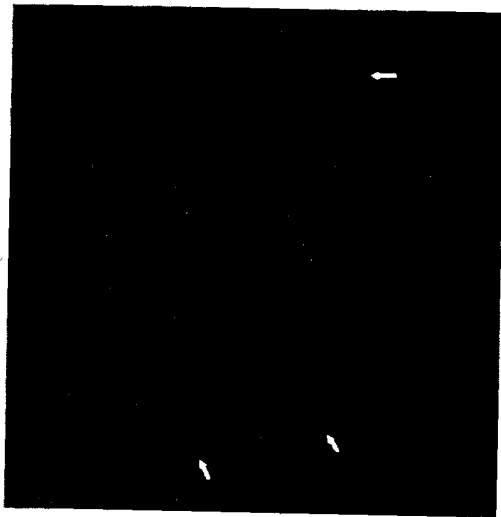


FIG. 4A

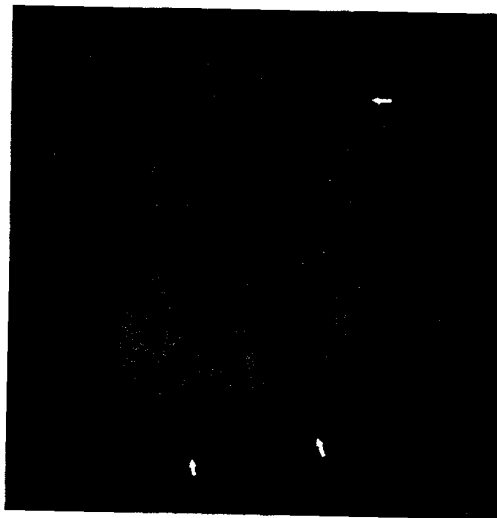


FIG. 4B

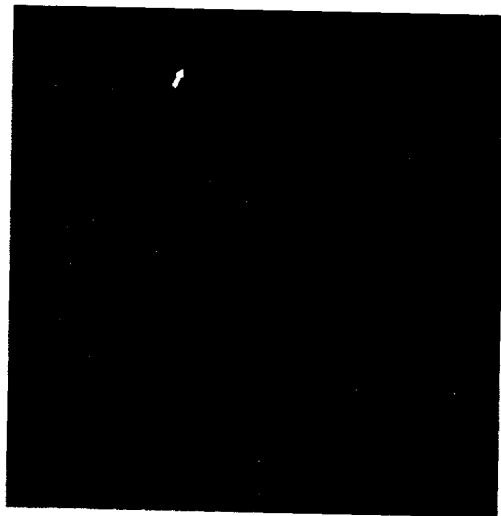


FIG. 4C

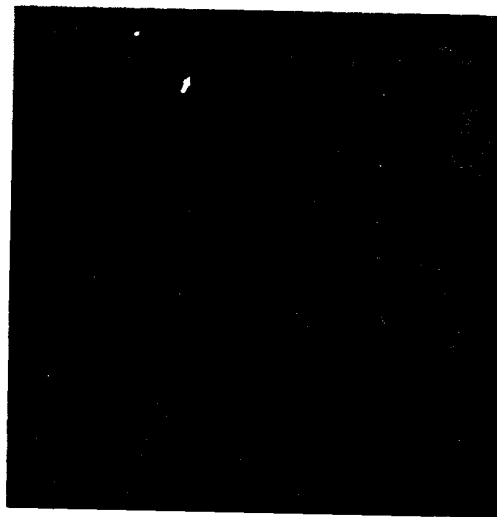


FIG. 4D

FIG. 4A

ppl. No. *To be assigned*; Group Art Unit: *To be assigned*;
kt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
ventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
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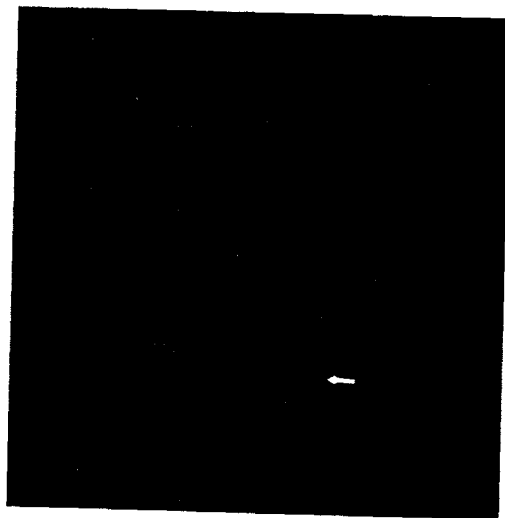


FIG. 5A

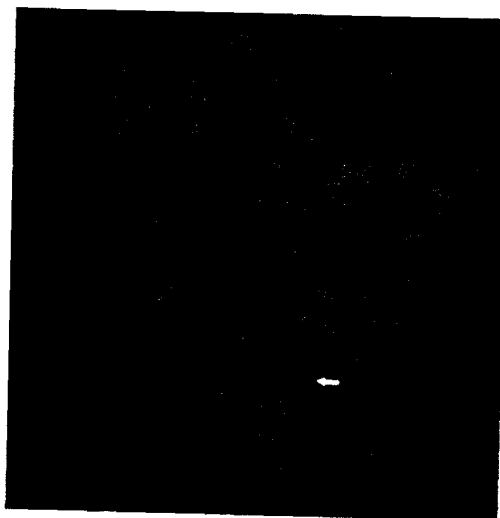


FIG. 5B

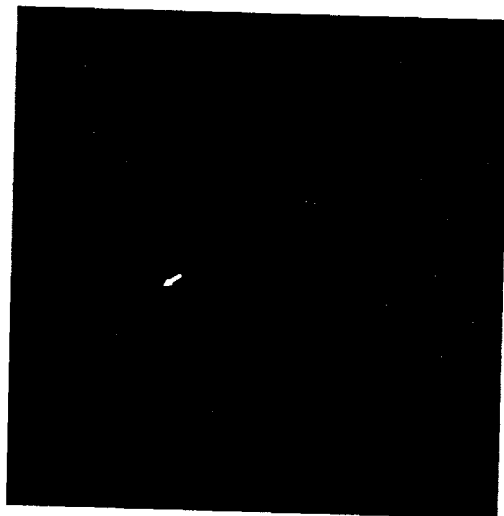


FIG. 5C

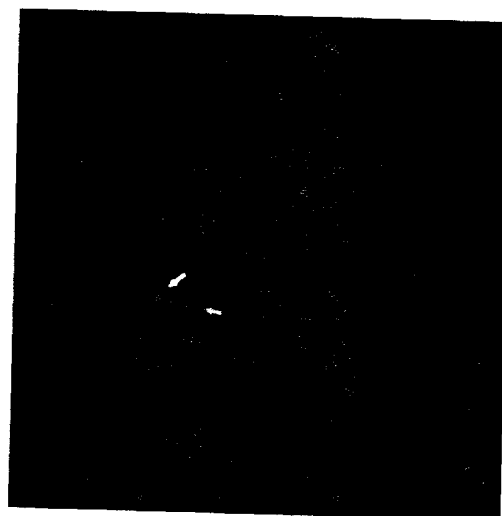


FIG. 5D

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Appl. No. *To be assigned*; Group Art Unit: *To be assigned*;
Dkt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
Inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
Title: ARTIFICIAL MAMMALIAN CHROMOSOME

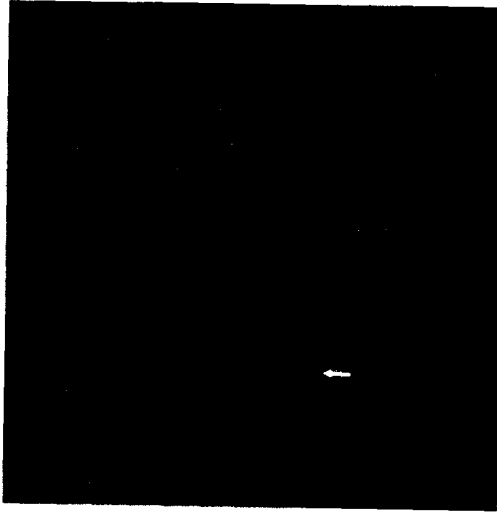


FIG. 5A

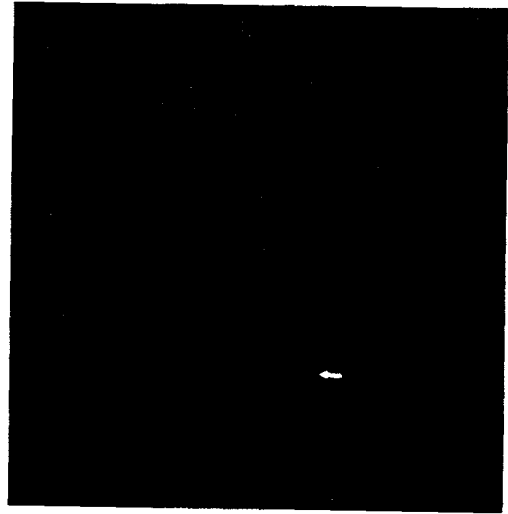


FIG. 5B

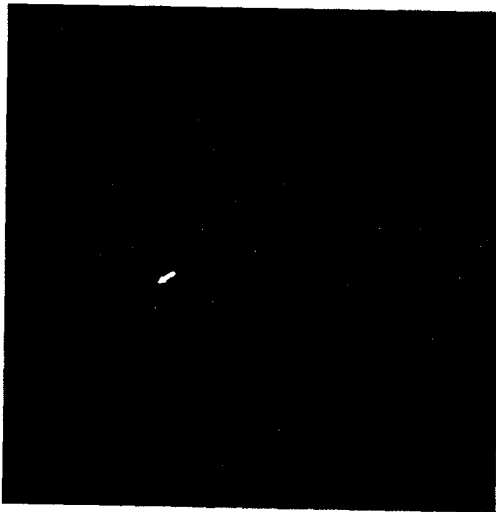


FIG. 5C

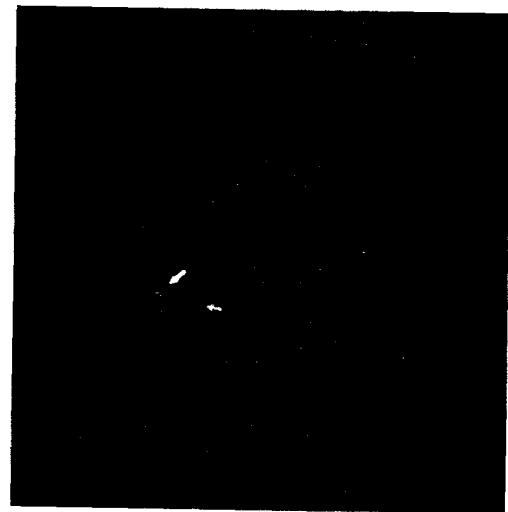


FIG. 5D

FIG. 5A

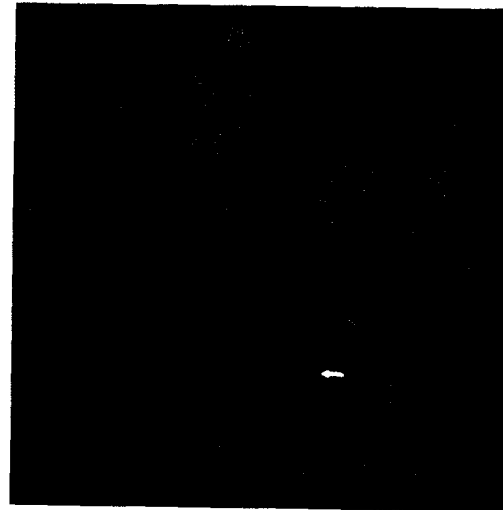


FIG. 5B

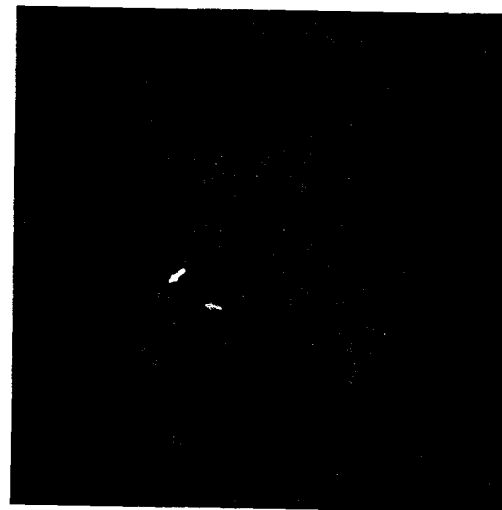


FIG. 5D

ppl. No. *To be assigned*; Group Art Unit: *To be assigned*;
 kt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
 ventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
 itle: ARTIFICIAL MAMMALIAN CHROMOSOME

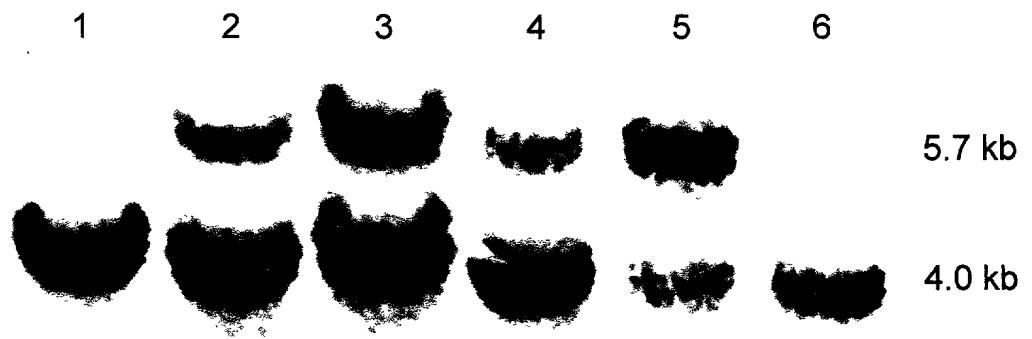


FIG.6A

10023033-1601




| <u>Clone</u> | <u>Transfected DNA</u> | <u>Estimated Amount of Synthetic Alpha Satellite DNA</u> |
|--------------|---|---|
| HT1080 |  |  |
| 22-6 | synthetic Y alpha satellite | 450 kb |
| 22-7 | synthetic Y alpha satellite | 1 mb |
| 22-11 | synthetic Y alpha satellite | 400 kb |
| 22-13 | synthetic Y alpha satellite | 2 mb |
| 23-1 | synthetic 17 alpha satellite |  |

Fig 6B

Appl. No. *To be assigned*; Group Art Unit: *To be assigned*;
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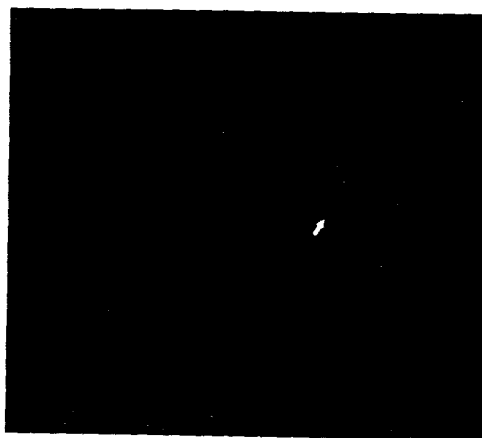


FIG. 7A



FIG. 7B

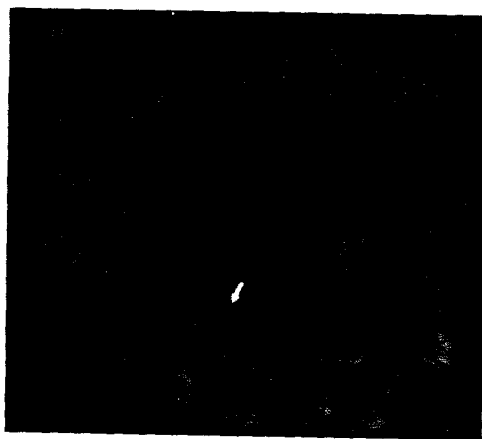


FIG. 7C

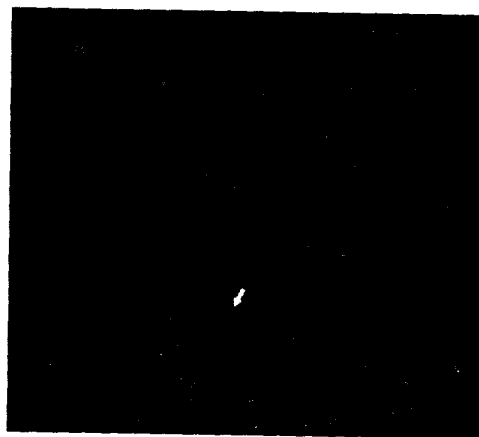


FIG. 7D

1002303 42001

ppl. No. *To be assigned*; Group Art Unit: *To be assigned*;
kt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
ventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
itle: ARTIFICIAL MAMMALIAN CHROMOSOME

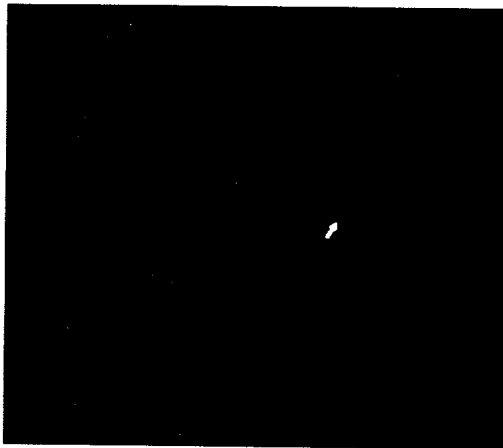


FIG. 7A



FIG. 7B

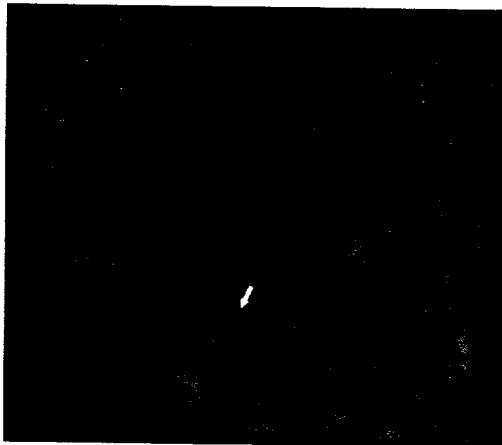


FIG. 7C

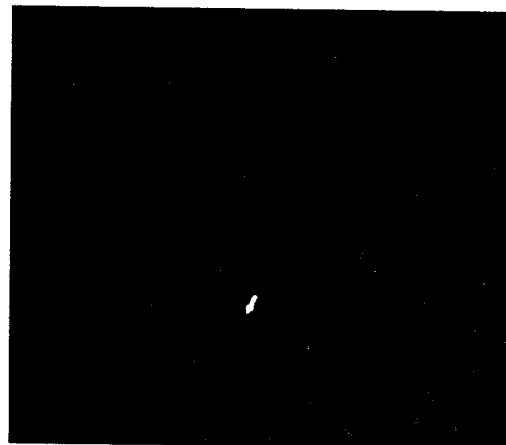


FIG. 7D

1003303-12101
T06T0T E00E00T

Appl. No. *To be assigned*; Group Art Unit: *To be assigned*;
 Dkt. No. 1522.0010004/MAC/LBB; Batch No.: *To be assigned*
 Inventor(s): HARRINGTON *et al.*; Tel: 202/371-2600
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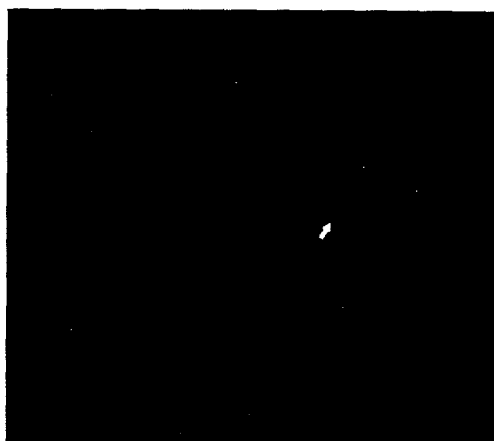


FIG. 7A



FIG. 7B

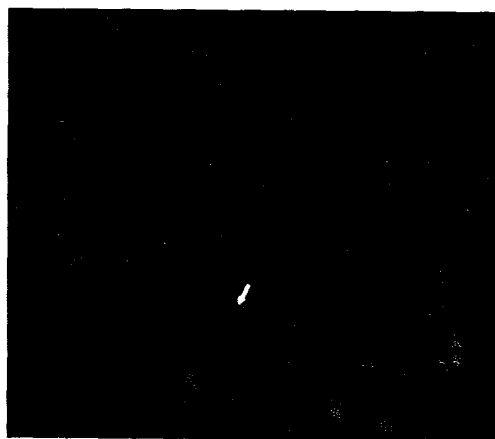


FIG. 7C

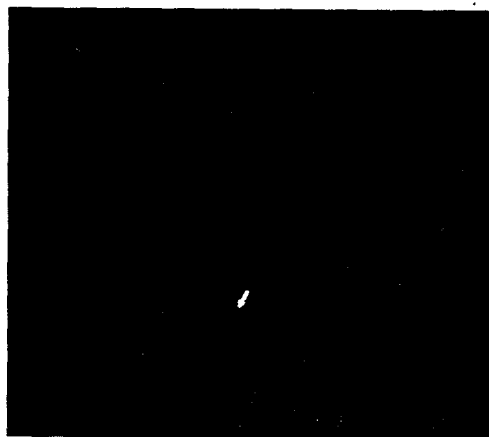


FIG. 7D

1002303, 121901

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FIG.8A



FIG.8B

ppl. No. *To be assigned*; Group Art Unit: *To be assigned*;
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title: ARTIFICIAL MAMMALIAN CHROMOSOME



FIG.8A



FIG.8B

10023033.121901

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Title: ARTIFICIAL MAMMALIAN CHROMOSOME

FIG.8A



FIG.8B